

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS • P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspfo.gov

APPLICATION NO. FILING DA	ATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/509,941 10/01/20	004	Elaine Sophie Elizabeth Stokes	100690-1P US 4973		
44992 7590 04/23/2007 ASTRAZENECA R&D BOSTON 35 GATEHOUSE DRIVE WALTHAM, MA 02451-1215			EXAM	EXAMINER	
			BALASUBRAMANIAN, VENKATARAMAN		
			ART UNIT	PAPER NUMBER	
			1624		
			T DEVIUE		
SHORTENED STATUTORY PERIOD OF RES	SPONSE	MAIL DATE	DELIVERY MODE		
21 DAVS		04/23/2007	PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

	Application No.	Applicant(s)			
	10/509,941	STOKES ET AL.			
Office Action Summary	Examiner	Art Unit			
	Venkataraman Balasubramanian	1624			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DATE of the state of the provisions of 37 CFR 1.1: after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim will apply and will expire SIX (6) MONTHS from , cause the application to become ABANDONE	L. nely filed the mailing date of this communication. D (35 U.S.C. § 133).			
Status					
1)⊠ Responsive to communication(s) filed on <u>01 O</u> 2a)□ This action is FINAL . 2b)□ This 3)□ Since this application is in condition for alloware closed in accordance with the practice under E	action is non-final. nce except for formal matters, pro				
Disposition of Claims					
4) ⊠ Claim(s) 1-11,14 and 16 is/are pending in the a 4a) Of the above claim(s) is/are withdraw 5) □ Claim(s) is/are allowed. 6) □ Claim(s) is/are rejected. 7) □ Claim(s) is/are objected to. 8) ⊠ Claim(s) 1-11, 14 and 16 are subject to restrict	wn from consideration.				
Application Papers					
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) acc Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Example 11.	epted or b) objected to by the I drawing(s) be held in abeyance. See tion is required if the drawing(s) is ob	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 119					
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 					
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary Paper No(s)/Mail Do				
Notice of Draisperson's Patent Drawing Review (PTO-946) Information Disclosure Statement(s) (PTO/SB/08) Solution					

DETAILED ACTION

Upon entering the preliminary amendment dated 10/1/2004, claims 1-11, 14 and 16 are pending.

Election/Restrictions

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-11, 14 and 16, drawn to compound of formula I wherein A ring is unfused pyrimidine, composition and method of use.

Group II, claim(s) 1-11, 14 and 16, drawn to compound of formula I wherein A is a heterocyclic ring other than pyrimidine provided above, composition and method of use. If group II is elected applicants should also choose a specific heterocyclic group for A group.

The inventions listed as Groups I and II do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

Where there is lack of unity the requirement for restriction is proper- See MPEP 803.02. The requirement for unity of invention is two-fold: (1) common utility and (2) sharing a substantial structural feature disclosed as being essential to the utility.

Invention I and II are independent and distinct from each other because they are directed to structurally dissimilar compounds that lack common core, namely, pyrimidine versus various heterocyclic groups such as pyridine, pyridazine, pyrazine, triazine,

thiazole and various other heterocyclic cores with varying in size and number and choice of heteroatoms. Consequently, the groups require separate prior art searches. They can be made and used independently. Art, which may render obvious or anticipate one of the groups would not necessarily do the same for the other group. For example prior art cited in the International Search Report may not be applicable to all the above groups. Each can support a patent as the compounds of each group are capable of being utilized alone not in combination with other members listed in the Markush group.

Except for amide core ring, every ring in the compound of formula I is varied and it cannot be said that the amide core essentially contributes utility recited in the claims. Thus, the common structural feature essential for the said utility is not met with. In addition, common utility requirement is also not met with as evident from the claims that these compounds can be used for treating cancer, thrombosis etc. Thus both the criteria set forth for unity of invention is not met with.

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions anticipated by the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

In view of distinct nature of each of the invention, the restriction is set forth in writing.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Conclusion

Any inquiry concerning this communication from the examiner should be addressed to Venkataraman Balasubramanian (Bala) whose telephone number is (571) 272-0662. The examiner can normally be reached on Monday through Thursday from 8.00 AM to 6.00 PM.

The Supervisory Patent Examiner (SPE) of the art unit 1624 is James O. Wilson, whose telephone number is 571-272-0661. The fax phone number for the organization where this application or proceeding is assigned (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-1600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAG. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you

Application/Control Number: 10/509,941

Art Unit: 1624

have questions on access to the Private PAIR system, contact the Electronic Business

Page 5

Center (EBC) at 866-2 17-9197 (toll-free).

Venkataraman Balasubramanian

4/17/2006